

CLAIMS

What is claimed is:

- Sub
A2
- 1 1. An image processing method comprising:
 - 2 capturing an image; and
 - 3 providing edge enhancements to the captured image as part of a demosaicing
 - 4 process.
 - 1 2. The method of claim 1, further comprising:
 - 2 performing post demosaicing processing on the captured image; and
 - 3 outputting the processed image.
 - 1 3. The method of claim 1, wherein providing the edge enhancements includes:
 - 2 creating a brightness map of the captured image.
 - 1 4. The method of claim 3, wherein providing the edge enhancements further
 - 2 includes:
 - 3 detecting edges of the captured image using the brightness map;
 - 4 creating a mask image from the edge detected brightness map; and
 - 5 performing unsharp edge enhancement from the masked image.

1 5. The method of claim 4, wherein providing the edge enhancements further
2 includes:
3 blending multiplicatively the unsharp edge enhanced image with the brightness
4 map.

1 6. An apparatus comprising:
2 an image capturing device to capture an image; and
3 a processor to provide edge enhancements to the captured image as part of a
4 demosaicing process.

1 7. The apparatus of claim 6, wherein the processor is to perform post demosaicing
2 processing on the captured image and to output the processed image.

1 8. The apparatus of claim 6, wherein the processor is to create a brightness map of
2 the captured image.

1 9. The apparatus of claim 8, wherein the processor is to detect edges of the
2 captured image using the brightness map, to create a mask image from the edge detected
3 brightness map, and to perform unsharp edge enhancement from the masked image.

1 10. The apparatus of claim 9, wherein the processor is to blend multiplicatively the
2 unsharp edge enhanced image with the brightness map.

1 11. A machine-readable medium that provides instructions, which if executed by a
2 processor, cause the processor to perform the operations comprising:
3 capturing an image; and
4 providing edge enhancements to the captured image as part of a demosaicing
5 process.

1 12. The machine-readable medium of claim 11, further providing instructions,
2 which if executed by the processor, cause the processor to perform the operations
3 comprising:
4 performing post demosaicing processing on the captured image; and
5 outputting the processed image.

1 13. The machine-readable medium of claim 11, further providing instructions,
2 which if executed by the processor, cause the processor to perform the operations
3 comprising:
4 creating a brightness map of the captured image.

1 14. The machine-readable medium of claim 13, further providing instructions,
2 which if executed by the processor, cause the processor to perform the operations
3 comprising:
4 detecting edges of the captured image using the brightness map;
5 creating a mask image from the edge detected brightness map; and
6 performing unsharp edge enhancement from the masked image.

1 15. The machine-readable medium of claim 14, further providing instructions,
2 which if executed by the processor, cause the processor to perform the operations
3 comprising:
4 blending multiplicatively the unsharp edge enhanced image with the brightness
5 map.

1 16. An image processing device comprising:
2 an image capturing unit to capture an image;
3 a memory device to store the captured image;
4 an output unit coupled to the memory device; and
5 a processor to provide edge enhancements to the captured image in the memory
6 device as part of a demosaicing process and to cause the enhanced image to be output is
7 to the output unit.

1 17. The image processing device of claim 16, wherein the image capturing unit
2 includes a charge-couple device (CCD) array, phototransistors, or photodiodes.

1 18. The image processing device of claim 16, wherein the output unit is a display
2 device.

1 19. The image processing device of claim 18, wherein the processor is to perform
2 post demosaicing processing on the captured image and to cause the image to be output
3 to the display device.

1 20. The image processing device of claim 19, wherein the post demosaicing
2 processing is a white balancing processing or a chromatic improvement processing.